

Amendments To The Claims

- 1-19. (cancelled)
20. (currently amended) A video graphics circuit comprising:
- a frame buffer, wherein the frame buffer stores display information; and
- a gamma correction block operably coupled to the frame buffer wherein the gamma correction block stores a plurality of sets of precomputed gamma corrected data corresponding to a plurality of gamma correction curves, wherein the gamma correction block receives the display information from the frame buffer and gamma selection information, and wherein the gamma correction block provides sets of gamma corrected data in response to the display information from a plurality of gamma correction [[curve]]curves selected by the gamma selection information, outputting a digital display signal including the sets of gamma corrected data for multiple windows on a display;~~and~~
- ~~a digital-to-analog converter operably coupled to the gamma correction block, wherein the digital-to-analog converter receives the gamma corrected data and generates an analog display signal, outputting the analog display signal.~~
21. (currently amended) A video graphics circuit comprising:
- a frame buffer, wherein the frame buffer stores display information;
- a gamma correction block operably coupled to the frame buffer wherein the gamma correction block stores a plurality of sets of precomputed gamma corrected data corresponding to a plurality of gamma correction curves, wherein the gamma correction block receives the display information from the frame buffer and gamma selection information, and wherein the gamma correction block provides sets of gamma corrected data in response to the display information from a plurality of gamma correction [[curve]]curves selected by the gamma selection information, outputting a digital display signal including the sets of gamma corrected data for multiple windows on a display; and

a video graphics processor operably coupled to the frame buffer, wherein the video graphics processor generates at least a portion of the display information stored in the frame buffer; ~~and~~

~~a digital-to-analog converter operably coupled to the gamma correction block, wherein the digital-to-analog converter receives the gamma corrected data and generates an analog display signal, outputting the analog display signal.~~

22. (currently amended) A method for gamma correction in a video graphics system, comprising:

receiving pixel information, wherein the pixel information is generated from display information stored within a frame buffer;

selecting ~~[[a set]]~~sets of gamma corrected data from a plurality of sets of precomputed gamma corrected data based on the pixel information and gamma selection information, wherein the plurality of sets of precomputed gamma corrected data includes sets of gamma corrected data corresponding to a plurality of gamma correction curves; and

~~converting the set of gamma corrected data from a digital format to a portion of an analog display signal; and~~

outputting a digital display signal including the ~~[[set]]~~sets of gamma corrected data for multiple windows on a display ~~and the analog display signal.~~

23. (currently amended) The video graphics circuit of claim 20 wherein the gamma correction block further includes:

a plurality of gamma correction lookup tables corresponding to a plurality of gamma values, wherein each of the plurality of lookup tables provides a set of ~~[[output]]~~precomputed gamma corrected data in response to received ~~input data~~ display information; and

a gamma table selector that receives the ~~[[set]]~~sets of ~~[[output]]~~precomputed gamma corrected data and automatically selects the ~~[[set]]~~sets of ~~[[output]]~~gamma corrected data corresponding to ~~one of the plurality of lookup tables~~ at least two

sets of precomputed gamma correct data, wherein the automatic selection of the [[set]]sets of [[output]]gamma corrected data is based on the gamma selection information.

24. (currently amended) The video graphics circuit of claim 23 wherein the precomputed gamma corrected data includes a pass through function, wherein the pass through function provides the display information as one of the [[set]]sets of gamma corrected data.

25. (currently amended) The video graphics circuit of claim 23, wherein the ~~gamma correction curve maps values of the display information to output values on the gamma correction curve.~~ gamma correction block further includes at least one gamma correction lookup table storing a plurality of gamma corrected data corresponding to a plurality of gamma correction curves, and wherein the at least one gamma correction lookup table storing a plurality of gamma corrected data provides a set of gamma corrected data to the gamma table selector in response to the received display information by mapping values of the display information to values of the plurality of gamma corrected data using a gamma correction curve of the plurality of gamma correction curves.

26. (currently amended) The video graphics circuit of claim 23, wherein a set of pixel data is provided as the display information to each of a plurality of gamma correction tables, wherein a gamma table selector includes a multiplexor that receives the sets of [[output]]precomputed gamma corrected data from the plurality of gamma correction lookup tables, and wherein the multiplexor selects [[a]]at least two selected [[set]]sets of [[output]]gamma corrected data from the sets of [[output]]precomputed gamma corrected data based on the gamma selection information.

27. (currently amended) The video graphics circuit of claim 25, wherein the gamma correction tables are memory structures addressed by the ~~received input data~~ display information.

28. (currently amended) The video graphics circuit of claim 21, wherein the gamma correction block further includes:

a plurality of gamma correction lookup tables corresponding to a plurality of gamma values, wherein each of the plurality of lookup tables provides a set of

[[output]]precomputed gamma corrected data in response to received input data display information; and

a gamma table selector that receives the [[set]]sets of [[output]]precomputed gamma corrected data and automatically selects the [[set]]sets of [[output]]gamma corrected data corresponding to one of the plurality of lookup tables at least two sets of precomputed gamma corrected data, wherein the automatic selection of the [[set]]sets of [[output]]gamma corrected data is based on the gamma selection information.

29. (currently amended) The video graphics circuit of claim 28 wherein the precomputed gamma corrected data includes a pass through function, wherein the pass through function provides the display information as one of the [[set]]sets of gamma corrected data.

30. (currently amended) The video graphics circuit of claim 28, wherein the ~~gamma correction curve maps values of the display information to output values on the gamma correction curve.~~ gamma correction block further includes at least one gamma correction lookup table storing a plurality of gamma corrected data corresponding to a plurality of gamma correction curves, and wherein the at least one gamma correction lookup table storing a plurality of gamma corrected data provides a set of gamma corrected data to the gamma table selector in response to the received display information by mapping values of the display information to values of the plurality of gamma corrected data using a gamma correction curve of the plurality of gamma correction curves.

31. (currently amended) The video graphics circuit of claim 28, wherein a set of pixel data is provided as the display information to each of a plurality of gamma correction tables, wherein a gamma table selector includes a multiplexor that receives the sets of [[output]]precomputed gamma corrected data from the plurality of gamma correction lookup tables, and wherein the multiplexor selects [[a]]at least two selected [[set]]sets of [[output]]gamma corrected data from the sets of output data based on the gamma selection information.

32. (currently amended) The video graphics circuit of claim 31, wherein the gamma correction tables are memory structures addressed by the received ~~input data~~ display information.

33. (new) The video graphics circuit of claim 20 further comprising a digital-to-analog converter operably coupled to the gamma correction block, wherein the digital-to-analog converter receives the sets gamma corrected data and generates an analog display signal, outputting the analog display signal for multiple windows on a second display.

34. (new) The video graphics circuit of claim 21 further comprising a digital-to-analog converter operably coupled to the gamma correction block, wherein the digital-to-analog converter receives the sets gamma corrected data and generates an analog display signal, outputting the analog display signal for multiple windows on a second display.

35. (new) The method of claim 22 further comprising:

converting the sets of gamma corrected data from a digital format to an analog format;
and

outputting an analog display signal for multiple windows on a second display, wherein
the analog display signal includes the converted sets of gamma corrected data.